

### **REMARKS**

Applicant respectfully asserts that the claims as amended contain allowable subject matter. Specifically, claims 35 and 41 are amended, with support for the amendments found in the specification and drawings. Favorable reconsideration and allowance of this application are respectfully requested in light of the above amendments and the remarks that follow.

#### **Claim 35**

Claim 35 generally requires an array for chemical screening having multiple filaments suspended in a frame where the filaments have different chemically reactive materials along their length separated by a repellent coating. Claim 35 and those claims depended on claim 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,037,186 (“Stimpson”) in view of U.S. Patent 6,288,220 (“Kambara”). It is believed that claim 35 should be allowed for the following reasons:

I. It is improper to compare the present invention against uncompleted components of Stimpson when there is no suggestion of using of those uncompleted components.

Stimpson teaches two-dimensional arrays of reactive chemicals constructed by bundling filaments in a pipe (or rolling a sheet having filament-like printing) then slicing the filaments like a jelly roll to produce essentially one-dimensional spots of reactive material arrayed in two dimensions. Stimpson at no point suggests a chemically screening array having filaments, but only describes filaments as a raw material used to produce spots. Thus, Stimpson simply fails to teach a chemical screening array having filaments or strips of any type.

II. The references of Stimpson and Kambara, in combination, fail to teach the elements of claim 35

Stimpson teaches two-dimensional chemical screening arrays having one-dimensional spots of different chemicals. Thus, Stimpson fails to teach chemical screening arrays having: (1) filaments, (2) different chemicals spotted on the outside of

the filaments along their length, (3) filaments held in a frame for exposure, (4) filaments with chemically repellent materials positioned between the spotted chemicals.

Kambara fails to remedy these deficiencies also not teaching a chemical screening array having: (1) filaments (Kambara teaches rigid tubes), (2) different chemicals spotted on the outside of the filaments along their length (Kambara teaches pre-treated particles inserted inside of rigid capillaries), (3) filaments held in a frame for exposure, (Kambara teaches an array of capillaries for analysis after individual exposure, not for exposure) (4) filaments with chemically repellent materials positioned between the spotted chemicals (Kambara teaches isolated particles obviating the need for a repellent material).

III. The references would not be combined by one of ordinary skill in the art.

A person of ordinary skill in the art would not combine these two references because of their different goals. Stimpson is intended for the mass production of two-dimensional arrays. See generally the Abstract. Kambara, on the other hand is clearly intended for wholly custom arrays down to the level of the individual spots. The Examiner has suggested that the combination would cut production costs, but in fact modifying a mass production process to be customized clearly increases production costs. On the other hand bundling the tubes of Kambara would provide no benefit as it would not enable the mass production of similar arrays.

IV. The Examiner's proposed modification would be inoperative

The Examiner appears to be proposing a combination of the particle-filled tubes of Kambara into a bundle according to Fig. 1A of Stimpson. This proposed combination would be in operative because there would be no way to optically read the fluorescent tags on the particles of Kambara when they are combined in a bundle. Nor does slicing the tubes bundled into two-dimensional arrays, as proposed by Stimpson, provide any advantage since the mass production benefit would be gone. It does not appear that the capillary tubes of Kambara could be bundled and sliced per Stimpson.

V. The Examiner has not provided evidence of factual inquiry into the knowledge of a person of ordinary skill in the art.

It is not sufficient for the Examiner to merely suggest an advantage to a combination of the references. What may appear to be an advantage to a layperson may

not be an actual motivation recognized to a person of ordinary skill in the art at the time of the invention. For example, the advantage may be offset by severe disadvantages not apparent to the layman. The Examiner must make a factual inquiry establishing the level of ordinary skill in the art and a recognition of a motivation for the combination by the person, and the Examiner should reveal the basis of that factual inquiry so that the Applicant may fairly respond. In this case, the Examiner has provided no more than a conclusory statement that the combination would be obvious to cut costs, an approach that is insufficient under the current Examiner Guidelines.

### **Claim 41**

Claim 41 generally requires a kit in which a library of different filaments having different chemical reactive materials along their length are assembled in a frame to create a semi-custom array. Claim 41 and those claims depended on claim 41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,037,186 (“Stimpson”) in view of U.S. Patent 6,288,220 (“Kambara”). It is believed that claim 41 should be allowed for the following reasons:

#### I. The references would not be combined by one the of ordinary skill in the art.

Stimpson is intended for the mass production of two-dimensional arrays. See generally the Abstract. Thus Stimpson teaches away from the creation of a large library of strips that will not be used in a given array, and customizing the arrays of Stimpson would defeat the intent of mass production. The Examiner has suggested that the combination would cut production costs, but in fact modifying a mass production process to be semi-customized clearly will increase production costs.

#### II. The Examiner's proposed modification would be unnecessary

Kambara provides complete flexibility in defining an array. There is no apparent advantage in combining it with Stimpson for the purpose of producing larger arrays because the Kambara method can be scaled to an arbitrarily large size without fundamental modification.

#### III. The references of Stimpson and Kambara, in combination, fail to teach the elements of claim 41

Stimpson teaches two-dimensional chemical screening arrays having one-dimensional spots of different chemicals. Thus, Stimpson fails to teach chemical screening arrays having: (1) filaments, (2) different chemicals spotted on the outside of the filaments along their length (3) filaments held in a frame for exposure, (4) making more types of filaments than may be used in a given array.

Kambara fails to remedy these deficiencies also not teaching a chemical screening array having: (1) filaments (Kambara teaches rigid tubes), (2) different chemicals spotted on the outside of the filaments along their length (Kambara teaches pre-treated particles inserted in rigid capillaries) (3) filaments held in a frame for exposure, (Kambara teaches an array of capillaries for analysis after individual exposure) (4) making more types of filaments than may be used in the array (Kambara teaches assembling pretreated particles into tubes to provide customization).

IV. The Examiner has not provided evidence of factual inquiry into the knowledge of a person of ordinary skill in the art at the time of the invention.

As before, it is not sufficient that the Examiner has envisioned an advantage to a combination of the references. What may appear to be an advantage to a layperson may not be a motivation recognized to a person of ordinary skill in the art at the time of the invention. For example, the advantage may be offset by severe disadvantages not apparent to the layman. The Examiner needs to undertake a factual inquiry establishing the level of ordinary skill in the art and a recognition of a person of ordinary skill in the art to make that combination, and provide the basis for the Examiner's conclusion to the Applicant so that the Applicant may fairly respond. In this case the Examiner has provided a merely conclusory statement that the combination would be obvious to cut costs, an approach that is insufficient under the current Examiner Guidelines.

**CONCLUSION**

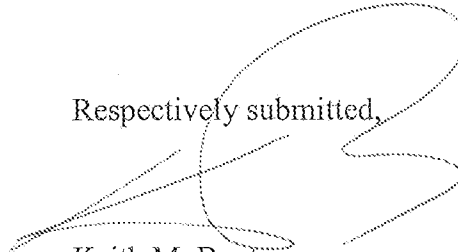
It is submitted that claims 2, 5-7, 9-13, 35, 41 and 43-52 are in compliance with 35 U.S.C. §§102, 103, and 112 and each defines patentable subject matter. A Notice of Allowance is, therefore, respectfully requested.

No fees are believed to be payable with this communication. Nevertheless, should the Examiner consider any fees to be payable in conjunction with this or any

future communication in this case, the director is authorized to charge any fee or credit any overpayment to Deposit Account No. 50-1170.

The Examiner is invited to contact the undersigned by telephone if it would help expedite the prosecution and allowance of this application.

Respectively submitted,

A handwritten signature in black ink, appearing to read 'Keith M. Baxter', is written over the typed name and contact information.

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